In the claims:

1. (Currently Amended) A vertebral implant for interposition between two vertebral endplates comprising:

a first endplate assembly for engaging a first vertebral endplate;

a second endplate assembly for engaging a second vertebral endplate; and

a first flexible core component interposed between the first and second endplate assemblies, the first flexible core component comprising a first end portion and a second end portion,

wherein the first end portion is coupled to the first endplate assembly to limit lateral translation of the first end portion with respect to the first endplate assembly and wherein the second end portion is pivotable with respect to the second endplate assembly.

2. (Currently Amended) The vertebral implant of claim 1 wherein the second end portion is coupled to the second endplate assembly to limit lateral translation of the second end portion with respect to the second endplate assembly and wherein the first end portion is pivotable with respect to the first endplate assembly.

3. (Original) The vertebral implant of claim 1 wherein the first endplate assembly articulates with respect to the second endplate assembly in a direction transverse to a longitudinal axis extending through the first and second vertebral endplates.

4. (Original) The vertebral implant of claim 1 wherein the first flexible core component comprises a first wear resistant articulating surface and the second endplate comprises a smooth articulating surface.

5. (Withdrawn) The vertebral implant of claim 4 wherein the first wear resistant articulating surface is convex and the smooth articulating surface is concave.

6. (Withdrawn) The vertebral implant of claim 4 wherein the first wear resistant articulating surface is concave and the smooth articulating surface is convex.

7. (Original) The vertebral implant of claim 4 wherein the first wear resistant articulating surface and the smooth articulating surfaces are flat.

8. (Original) The vertebral implant of claim 4 wherein the first wear resistant articulating surface comprises an ultra-high molecular weight polyethylene (UHMWPE).

9. (Original) The vertebral implant of claim 4 wherein the first wear resistant articulating surface comprises a cobalt-chrome alloy.

10. (Original) The vertebral implant of claim 4 wherein the first wear resistant articulating surface comprises cross-linked UHMWPE.

11. (Original) The vertebral implant of claim 4 wherein the first wear resistant articulating surface comprises polyetheretherketone (PEEK).

12. (Original) The vertebral implant of claim 4 wherein the first wear resistant articulating surface comprises polyurethane treated with a metal ion implantation.

13. (Original) The vertebral implant of claim 1 wherein the first flexible core component comprises a second wear resistant articulating surface and the second endplate comprises a smooth articulating surface.

14. (Original) The vertebral implant of claim 1 wherein the first flexible core component comprises first and second wear resistant articulating surfaces covering less than the entire surface of the first flexible core component.

15. (Original) The vertebral implant of claim 1 wherein the first flexible core component comprises polyurethane.

16. (Original) The vertebral implant of claim 1 wherein the first flexible core component comprises silicone.

17. (Original) The vertebral implant of claim 1 wherein the first flexible core component comprises a hydrogel.

18. (Original) The vertebral implant of claim 1 wherein the first flexible core component comprises copolymers of silicone and polyurethane.

19. (Withdrawn) The vertebral implant of claim 1 further comprising a second core component attached to the second endplate assembly, the second core component comprising a flexible material.

20. (Withdrawn) The vertebral implant of claim 19 wherein the second core component further comprises a second wear resistant articulating surface.

21. (Original) The vertebral implant of claim 1 wherein the first endplate assembly comprises a first coupling mechanism and wherein the first core component is coupled to the first endplate assembly with the first coupling mechanism.

22. (Original) The vertebral implant of claim 21 wherein the first coupling mechanism is a groove for engaging a complementary ridge of the first core component.

23. (Withdrawn) The vertebral implant of claim 21 wherein the first coupling mechanism is a first bumper for engaging a first groove formed in the first core component.

24. (Withdrawn) The vertebral implant of claim 23 wherein the first bumper and first groove restrict pivoting to between one and twenty degrees of rotation.

25. (Withdrawn) The vertebral implant of claim 23 further comprising at least one tether

extending between the first endplate assembly and the second endplate assembly to constrain motion of the vertebral implant.

26. (Withdrawn) The vertebral implant of claim 25 wherein the at least one tether comprises a woven cord.

27. (Withdrawn) The vertebral implant of claim 25 wherein the at least one tether comprises a wire.

28. (Withdrawn) The vertebral implant of claim 21 wherein the second endplate assembly comprises a second coupling mechanism and wherein the first flexible core component is coupled to the second endplate assembly with the second coupling mechanism.

29. (Withdrawn) The vertebral implant of claim 28 wherein the second coupling mechanism is a second bumper for engaging a second groove formed on the first flexible core component.

30. (Withdrawn) The vertebral implant of claim 1 further comprising at least one tether extending between the first and second end portions of the first flexible core component to constrain motion of the vertebral implant, wherein the at least one tether passes through the first flexible core component.

31. (Withdrawn) The vertebral implant of claim 30 wherein the at least one tether extends at an angle oblique to a longitudinal axis extending through the vertebral endplates.

32. (Withdrawn) The vertebral implant of claim 20 wherein the at least one tether extends parallel to a longitudinal axis extending through the vertebral endplates.

33. (Withdrawn) The vertebral implant of claim 1 further comprising at least one modification element embedded in the first flexible core component to modify the flexibility of the first flexible core component, wherein the modification element comprises a material

different from the first flexible core component.

34. (Withdrawn) The vertebral implant of claim 33 wherein the at least one modification element is a pair of kidney shaped modification elements within the first flexible core component.

35. (Withdrawn) The vertebral implant of claim 33 wherein the at least one modification element forms a ring within the first flexible core component.

36. (Withdrawn) The vertebral implant of clam 33 wherein the at least one modification element is a single body centered within the first flexible core component.

37. (Withdrawn) The vertebral implant of claim 33 wherein the at least one modification element is a plurality of modification elements randomly dispersed throughout the first flexible core component.

38. (Withdrawn) The vertebral implant of claim 33 wherein the at least one modification element comprises a metal.

39. (Withdrawn) The vertebral implant of claim 33 wherein the at least one modification element comprises an elastomer.

40. (Withdrawn) The vertebral implant of claim 33 wherein the at least one modification element is a void.

41. (Withdrawn) The vertebral implant of claim 40 wherein the void is filled with a therapeutic agent.

42. (Withdrawn) The vertebral implant of claim 1 wherein the first endplate assembly has a rectangular shape.

43. (Withdrawn) The vertebral implant of claim 1 wherein the first endplate assembly has a kidney shape.

44. (Withdrawn) The vertebral implant of claim 1 wherein the first endplate assembly has an elliptical shape.

45. (Withdrawn) The vertebral implant of claim 1 wherein the first endplate assembly comprises a first exterior surface and the second endplate assembly comprises a second exterior surface, and wherein the first and second exterior surfaces are angled with respect to each other.

46. (Withdrawn) The vertebral implant of claim 45 wherein the first endplate assembly is wedge-shaped.

47. (Withdrawn) The vertebral implant of claim 45 wherein the first flexible core component is wedge shaped.

48. (Withdrawn) The vertebral implant of claim 1 wherein the first endplate assembly comprises a first exterior surface and wherein the at least one fixation feature projects from the first exterior surface.

49. (Withdrawn) The vertebral implant of claim 48 wherein the at least one fixation feature is a set of spikes.

50. (Withdrawn) The vertebral implant of claim 48 wherein the at least one fixation feature is one or more roughened keels.

51. (Withdrawn) The vertebral implant of claim 48 wherein the at least one fixation feature is a diamond cut surface.

52. (Withdrawn) A method for installing an intervertebral prosthesis between a first vertebral endplate and a second vertebral endplate, the method comprising:

attaching a core component to a first endplate assembly, the core component comprising a hardened articulating surface and a flexible portion;

providing a second endplate assembly comprising a smooth inner surface;

positioning the hardened articulating surface of the core component proximate to the smooth inner surface of the second endplate assembly;

engaging the first endplate assembly with the first vertebral endplate; and

engaging the second endplate assembly with the second vertebral endplate, wherein the core component engages a groove in the first endplate assembly and wherein the first endplate assembly is rotatable with respect to the second endplate assembly.

53. (Original) A vertebral implant for interposition between two vertebral endplates comprising:

a first endplate assembly for engaging a first vertebral endplate;

a second endplate assembly for engaging a second vertebral endplate; and

a first flexible core component interposed between the first and second endplate assemblies, the first flexible core component comprising an outer surface,

wherein the outer surface comprises an articulating surface, the articulating surface covering less than the entire outer surface, and

wherein the first endplate assembly comprises a coupling mechanism shaped to match a contour of the first flexible core component.

54. (Withdrawn) The vertebral implant of claim 53 wherein the coupling mechanism is a convex curved protrusion shaped to match a depression in the first flexible core component.

55. (Withdrawn) The vertebral implant of claim 53 wherein the coupling mechanism is a ring shaped protrusion shaped to match a ring shaped depression in the first flexible core component.

56. (Withdrawn) The vertebral implant of claim 53 wherein the first flexible core

component is torus shaped and the coupling mechanism is a convex curved protrusion.

57. (Withdrawn) The vertebral implant of claim 53 wherein the coupling mechanism is a set of concentric dove tailed grooves.

58. (Original) A vertebral implant for interposition between two vertebral endplates, the vertebral implant comprising:

a first endplate assembly comprising a first vertebral endplate contact surface and a first interior surface;

a second endplate assembly comprising a second vertebral endplate contact surface and a second interior surface;

a flexible core component interposed between the first and second interior surfaces, the flexible core component comprising a first end portion and a second end portion,

wherein the first end portion comprises a coupling mechanism for coupling to the first interior surface to prevent translation of the first end portion with respect to the first endplate assembly, and

wherein the second end portion is pivotable with respect to the second endplate assembly.

59. (Original) The vertebral implant of claim 58 wherein the first end portion is affixed to the first endplate assembly to prevent rotation between the first end portion and the first endplate assembly.

60. (Original) The vertebral implant of claim 58 wherein the first end portion is harder than a flexible portion of the flexible core component.

61. (Original) The vertebral implant of claim 58 wherein an articulating portion of the flexible core component is harder than the first end portion.

62. (New) A hybrid vertebral implant comprising:

first and second opposing endplate assemblies, each endplate assembly comprising an

engagement surface; and

an elastically deformable core component comprising opposite end surfaces configured to engage the engagement surfaces,

wherein each engagement surface prevents linear displacement of the respective end surface while permitting rotational motion between the respective engagement and end surfaces.

63. (New) The hybrid vertebral implant of claim 62 wherein the end surfaces comprise a wear resistant material.

64. (New) The hybrid vertebral implant of claim 62 wherein the opposite end surfaces are flat.

65. (New) The hybrid vertebral implant of claim 62 wherein the elastically deformable core component comprises a portion having a lower modulus of elasticity than the opposite end surfaces.

66. (New) The hybrid vertebral implant of claim 62 wherein the elastically deformable core comprises a polyolefin rubber.

67. (New) The hybrid vertebral implant of claim 62 wherein the elastically deformable core component comprises polyurethane.

68. (New) The hybrid vertebral implant of claim 62 wherein the elastically deformable core component comprises silicone.

69. (New) The hybrid vertebral implant of claim 62 wherein the elastically deformable core component comprises a hydrogel.